F-35B Short Take-Off Vertical Landing (STOVL) Joint Strike Fighter (JSF)



DESCRIPTION

The F-35B STOVL JSF is a single engine, stealthy, supersonic, strike-fighter aircraft capable of short take-offs and vertical landings. JSF will combine the basing flexibility of the AV-8B with the multi-role capabilities, speed, and maneuverability of the F/A-18 to fulfill both the air-to-ground and air-to-air requirements of the Marine Corps. The aircraft will have very low radar cross-section and provide superior capabilities over legacy aircraft in the areas of survivability, lethality, and supportability. The F-35 will replace the Marine Corps' AV-8B and F/A-18A/C/D fleets, affirming a tremendous growth potential as the JSF matures into the premier next-generation weapons system.

OPERATIONAL IMPACT

The STOVL JSF provides a multimission offensive air support and an offensive/defensive anti-air capability. The STOVL JSF also provides the MAGTF with a platform capable of tactical air control and tactical reconnaissance.

Additionally, the aircraft will be able to provide destruction of enemy air defenses. The requirements for this aircraft are focused on readiness, the combined arms concept, and expeditionary capability and the ability to conduct Expeditionary Maneuver Warfare.

PROGRAM STATUS

The JSF is a joint program with the Air Force, Navy, Marine Corps, and the United Kingdom as Level I partners. Participating as Level II partners are Italy and The Netherlands; Level III partners are Canada, Denmark, Norway, Turkey, and Australia. After reassessing the program baseline, the Systems Development and Demonstration phase is scheduled to last until 2013. The SDD phase will include the certification of various precision engagement capabilities, as well as cutting-edge sensor fusion that will directly support the MAGTF commander. The program is scheduled to conduct the Critical Design Review (CDR) in February 2006. After completing CDR, the prime contractor will begin preparing the long lead items needed for Low Rate Initial Production scheduled for 2007. STOVL first flight is scheduled for fourth quarter of 2007, with follow on IOC in 2012.

Procurement Profile: FY 06 FY 07
Quantity: 0 0

Developer/Manufacturer:

- Air Vehicle: Lockheed Martin, Northrop Grumman, and British Aerospace Engineering
- Propulsion: Pratt & Whitney and General Electric